with his assistance and advice, by Dr. Thomas Dwight. The following additional points were made out.

The skull had been packed with oakum at the time of birth. On the removal of the oakum a shriveled mass of tissue, apparently the remains of the brain and membranes, was found attached to the base of the cranium. Most of the cranial nerves were identified, and considering the length of time that had elapsed since the birth, and the want of care from which the specimen had occasionally suffered, it seems probable that the brain may have been normal. The misshapen foot, A, projecting from the nostril, is accurately represented in the drawing by Dr. Quincy. Even the toe-nails are quite distinct. The mouth is long and the lips thin. The pedicle, B, of the mass projecting from the mouth is connected with the foot, as is clearly shown by traction on one or the other. It is probably attached to the top of the pharynx, but this could not be determined certainly without too much injury to the specimen. A probe introduced into the right nostril by the side of the foot may be brought out through the mouth at the right of the pedicle, or it may be carried into the interior of the latter. A probe passed into the other nostril comes out to the left of the tumor. The hard palate, consequently, can be but slightly developed. A prominence, C, was found on the lower part of the protruding mass, from which projected a thumb and two fingers. The thumb and one finger were bent; the other was straight, and measured one quarter of an inch in length. There was bone in both the hand and the foot, but not in the remainder of the mass. This was incised on its posterior aspect, and, at about a quarter of an inch from the surface, a large sac with distinctly fibrous walls was encountered. It appeared to be lined with a serous membrane, which presented several valvular folds partially subdividing the cavity. A probe passed readily into a long, narrow passage leading from this space through the pedicle into the right nostril. — EDITORS.]

THREE RARE CASES OF UTERINE SURGERY OCCURRING IN THE PRACTICE OF DR. FREUND, OF BRESLAU.

REPORTED BY SAMUEL HOWE, M. D.

THE three following cases, which have recently occurred here in the practice of Dr. Freund, seem to present so many points of interest that I have taken an early opportunity to send the notes of them for the benefit of the readers of the JOURNAL.

CASE I. *Ovarian Cyst; Ligature of Pedicle; Cure.* — Mrs. Volkmann, from Liednitz, in Silesia, fifty-six years old, first menstruated at fifteen years of age. Then a menostasis of a year followed, after which the catamenia were regular. At twenty-three she married. The

patient has had thirteen children and one miscarriage. Last child was born twelve years ago. The miscarriage came after the seventh child. All the labors before the miscarriage were normal. After the miscarriage, for the first time the patient noticed a swelling in the right iliac fossa. The following six labors were abnormal, and in each case turning and extraction were resorted to. Four years ago the patient had small-pox. After this the tumor grew very rapidly, accompanied by pain in the right side, dysuria, and constipation. The patient, after her first confinement, had a large umbilical hernia. At the time she first saw Dr. Freund, in 1872, she complained of long continued and painful menstruation. On examination she appeared weak and anæmic. The abdomen was as large as at full term of pregnancy, and uneven. This unevenness was due, first, to the umbilical hernia, which was as large as a man's fist; second, to numerous small protuberances, which were especially noticeable in the right iliac region; third, to a tumor just above the symphysis pubis, which proved to be the uterus. On palpation and vaginal examination a multilocular cyst of the right ovary was diagnosticated, which filled the cavity of the pelvis and most of the abdomen. The uterus was pulled upwards and forwards, so that the neck of the bladder was compressed. On examination with the sound the cavity of the uterus was found considerably increased in size; on withdrawing the sound two or three teaspoonfuls of reddish-brown fluid escaped, which proved to be retained menstrual blood. Rectal examination gave the following: cavity of pelvis filled with tumor; tumor adherent, especially on the right side. A connecting band from the right corner of the uterus to the tumor was very noticeable. The band was tense and well defined, and its upper edge was concave. The large cyst of the tumor was then tapped with a trocar, in order to make the diagnosis more certain. The fluid was clearly ovarian. After the tapping and emptying of the cyst the adhesions and position of the abdominal organs could be very clearly made out. The patient was much relieved by the operation, and returned home.

During the following four years it was necessary, as is almost always the case, to puncture the tumor often, the time between each tapping becoming shorter and shorter. The general condition of the patient grew worse, and demanded radical treatment more and more. But ovariotomy in this case was out of the question, since, according to the opinions of most ovariotomists, in those cases in which there are firm adhesions in the cavity of the pelvis the operation is almost always attended with fatal results. Atlee alone, in his book, gives a more favorable, but still not a good prognosis. The spontaneous cure of ovarian tumors has been described by several pathological anatomists, and their cases suggested to Dr. Freund the manner of operating in this instance. A brief description of the pathological changes which take place

in the so-called spontaneous cure may not be out of place here. This process consists in some change either in the tumor itself or in the pedicle. The last, only, interests us in regard to this case. The changes in the pedicle are due either to inflammation or to its twisting, by the changes in the position of the tumor, so that the supply of blood which goes to it is cut off. The last may take place slowly or rapidly. The effect of these changes in the pedicle, if rapid, is destruction of the cyst, either from bleeding into the cavity of the tumor or from gangrene, both, of course, attended with fatal result. But if this twisting takes place slowly, the supply of blood to the tumor being gradually cut off, the change in the tumor may go on so slowly that a shrinking and fatty degeneration or calcification of the cyst follows, and the patient recovers. The great danger in interfering with the amount of blood which goes to the tumor is of course from gangrene, the tumor being thus deprived of nourishment; and it is only in those cases in which there is a secondary supply of blood through adhesion that such an operation should be thought of. It is fortunate that these are the very cases in which a more active interference, that is, ovariotomy, is out of the question, as in this instance. The intention of the operator in this case was to tie the principal nourishing artery of the pedicle with one suture, without dividing the pedicle. Three weeks before the operation was performed the tumor was tapped, the fluid withdrawn being bloody. The patient, after tapping, was very faint for half an hour. At the time of the operation the sac had again filled the abdomen, and was tense and fluctuating. The operation, under chloroform and according to Lister's antiseptic method, was performed by Dr. Freund, assisted by Doctors Martini, Kolaczek, M. B. Freund (brother of the operator), his clinical assistant, Dr. Kurner, and the writer of this letter.

An incision three inches long, to the right and below the lower border of the umbilical hernia, was made directly over the pedicle of the tumor. After making certain that that which was felt was the pedicle, a second smaller incision, from the upper end of the first, and at right angles to it, was made along the pedicle. A large curved needle, carrying a thick carbolized suture, was passed through the Fallopian tube and the upper part of the broad ligament near the uterus, and tied as tightly as possible. The ligature took in about two thirds of the pedicle, including the artery of the pedicle, which ran along the anterior part. A second ligature, about an inch from the first, was passed round the ligamentum ovarii and tied. Both ligatures were then cut short. A drainage tube was introduced in the lower end of the wound, and the edges brought together with silver sutures. The wound was then dressed with charpie and carbolic oil.

The wound healed well, the only drawback being a small abscess in the skin about one of the needle holes. In ten days the patient was

out of bed. Her condition was very much improved, the abdomen daily growing smaller. The distance from one anterior superior spinous process of the ilium to the other, over the swollen abdomen, at the time of the operation was forty-three centimetres; fourteen days after, forty centimetres; and twenty-two days after, thirty-four centimetres. The upper border of the tumor at the time of the operation was above the upper edge of the umbilical hernia, that is, midway between the umbilicus and the ensiform cartilage; twenty-two days after, it was only three fingers' breadth above the symphysis. The line of the incision in the skin was at the time of operation oblique, running from right to left, and just below the umbilical hernia. Now it runs from left to right, and is just over the inguinal canal. The hard portions of the tumor, which at the time of the operation were in the right iliac fossa, are smaller and deeper in the pelvic cavity, and more movable, owing to the lax condition of the abdominal walls. The greater part of the tumor, which was felt behind the uterus in Douglas's cul-de-sac, was firmer, irregular in form, and smaller, so that the uterus was no longer pressed against the anterior abdominal wall, but lay more in the middle of the pelvic cavity. The general condition of the patient was very much improved. About two weeks after the operation she menstruated. Of course, in such a case as this it is impossible to say whether or not the tumor will again begin to grow when the collateral circulation becomes stronger, but as at the time of the operation the patient was in so poor a general condition that something decided in the way of treatment was demanded, and since that she has experienced such relief, it would seem that, as a way of alleviating if not of curing, this manner of operating would often be found of benefit. Time, of course, will alone show how beneficial it is.

Case II. *Case of Double Ovariotomy.* — Mrs. M., thirty-six years of age; menstruation regular and profuse, with a tendency to diarrhœa. Was first seen by Dr. Freund in October, 1874. In October, 1873, her second child was born. Her first labor was ended with forceps. The second was normal. Since the last birth she has noticed that her abdomen was larger than normal, and on this account she sought medical advice. On examination the abdomen was found as large as at the sixth month of pregnancy; her general condition was bad. She complained of cough and diarrhœa. The tumor, which was felt through the abdominal wall, on careful examination was made out to be a multilocular cyst of the left ovary. As the tumor was small at this time, no operation was advised. In October, 1875, after a year's treatment with tonics and nourishing diet, the patient's general condition was very much improved, and the tumor was found to have become smaller. The right ovary could be clearly made out through the vagina to be of normal size. The uterus was anteverted and dextroverted. The pedicle of the ova-

rian tumor could be felt, on examination, above and to the left of the uterus. In May, 1876, the tumor had considerably increased in size; the general condition of the patient was bad. She suffered considerably from dyspepsia, dyspnœa, and pain. The uterus was found to be still anteverted, although the cavity of the pelvis was free from the tumor. The right ovary could no longer be felt. May 1st, the largest cyst of the tumor was tapped, the fluid being clearly ovarian. May 6th the operation was performed, Lister's antiseptic method being used. The administration of chloroform was discontinued after the abdominal cavity was opened, as the patient became asphyxiated. The left ovarian cyst was of the size of a man's head, and multilocular. There were some slight adhesions to the anterior abdominal wall, which were separated, however, without difficulty. The cysts were emptied with the ordinary Spencer Wells ovarian trocar, and the sac was pulled out of the abdominal cavity while a clamp was applied and the sac cut away. The right ovary was found also to be enlarged to about the size of a large Spanish chestnut. The growth was due to general cystoid degeneration, and only at the hilus of the ovary was a small band of healthy ovarian tissue found. A clamp was applied and the ovary removed. Both pedicles were then cauterized with a hot iron. The pedicle of the left ovarian tumor was placed in the lower angle of the wound and the edges of the wound brought together with one suture, and above this the pedicle of the second right ovary, and about this three silver sutures. The wound was dressed with Lister's antiseptic dressing. During the operation the right ovary, tube, and broad ligament were found to be very much swollen, red, and congested, with large dilated veins. Rapid recovery followed the operation. The two clamps came away, one on the seventh, the other on the ninth day. On the fourth day after the operation the patient menstruated, with the ordinary symptoms of pain in the back and diarrhœa. On the ninth day, on account of a slight attack of indigestion, there was a marked rise in the temperature, accompanied by fever; this, however, soon passed off.

After this the patient did remarkably well, and was soon out of bed. The treatment, as regards diet, etc., after ovariotomy, which Dr. Freund uses, consists in giving the patient for the first few days as little nourishment as possible, a little very thin soup being all which he allows. No alcohol, and as little opium as possible, is ordered.

The interesting points of this case are, according to Dr. Freund's opinion, these: 1st. That the tumor should, under general treatment, have grown smaller for a time and then increased in size. 2d. That the right ovary, which in October, 1875, could be plainly made out as of normal size, should in one year's time have increased to the size of a large Spanish chestnut. 3d. That the process of menstruation was at hand at the time of the operation, and on this account was the right tube

congested and swollen; the left was not so. The emptying of the cyst a few days before the operation Dr. Freund thinks of importance for the following reasons: the wound in the abdomen is thus rendered smaller; the circulation and respiration are not so suddenly changed at the time of operation, and therefore there is less tendency to shock and faintness. The last seven cases of ovariotomy which he has performed were done in this manner, and all have been successful, the patient going through the recovery without any fever whatever.

Case III. *Double Uterus, with Hydrometra and Sarcoma of one Horn.* — Patient sixty years of age, married, sterile. Complained of pain in the abdomen which resembled labor pains. For thirteen years she had not menstruated. Three months before, the patient noticed a swelling in the lower part of the abdomen. Her condition at the time the examination was made was very bad. She was weak and anæmic, and on examination a pear-shaped tumor, very sensitive to pressure, could be felt through the abdominal wall, just above the symphysis. The tumor was about the size of a uterus at five months' pregnancy. Vaginal examination gave the following: Vagina in upper part was funnel-shaped. On the right side a crescent-shaped opening could be felt, bound on the outside by a membrane; each lip on the inside by a tumor which proved to be the lower part of the pear-shaped body felt through the abdominal walls. A sound could be passed through this opening three centimetres to the right of the tumor. The condition and form of the os uteri, the shape of the tumor, the symptoms of the disease, pain like labor pains, with great tenderness on pressure, showed that it was probably a case of double uterus, with occlusion and accumulation in one half, — hydrometra, — as the patient suffered extremely from dysuria and pain in defæcation.

Dr. Freund thought that an operation was advisable. The tumor was accordingly tapped through the vagina with a fine aspirator-needle, and the fluid drawn off with an aspirator. The amount thus obtained was about a quart, and was thin, stained with blood, and on microscopic examination was found to contain spindle-shaped sarcomatous cells, pus, changed red-blood corpuscles, and a large amount of mucus. From this the diagnosis of sarcoma of the left half of the uterus, with hydrometra, was decided upon. Three days after the operation the patient died, previous to her death suffering from vomiting, pain in abdomen, and tympanites. The autopsy showed that the cause of death was ileus. The uterus, which was adherent to the omentum, after the fluid was drawn off sank into the pelvic cavity, thereby pulling on the omentum. One of the coils of small intestines near the ileo-cœcal valve was constricted and strangulated so that the patient died. The autopsy also confirmed the correctness of the diagnosis — double uterus, with sarcoma and hydrometra of the left half. The section of the tumor showed the walls of the

uterus very much increased in thickness, especially at the fundus. The sarcomatous part was principally in the fundus. The inner surface of the uterus was ragged, macerated, and stained with blood. The cervical canal could be made out, though not very distinctly. The other part of the uterus was normal.

This case is interesting, especially as double uterus is rare, and with sarcoma and hydrometra very exceptional. Dr. Freund said that he had never seen such a case before. The examination of the tumor with the microscope proved it to be a spindle-celled sarcoma.

[In the *American Journal of Obstetrics*, February, 1875, four cases of echinococcus in the female pelvis were reported by Drs. Freund and Chadwick. The Case No. II., of Miss J., is interesting as proving that the diagnosis which was made was correct. The patient died this last May, and at the autopsy it was found that plates 3 and 4 were correct. The specimen was shown before the Schlesischer Medical Society in June, 1876. Since the report was written a sac had appeared on the anterior wall of the uterus, of the size of an apple. All these sacs were subperitoneal, a fact which Dr. Freund lays some stress on, and says that with echinococcus about the uterus it is always the case.]

BRESLAU, *July*, 1876.

RECENT PROGRESS IN OBSTETRICS AND GYNÆCOLOGY.[1]

BY W. L. RICHARDSON, M. D.

GYNÆCOLOGY.

Differential Diagnosis between Subperitoneal Serous Cysts and Ovarian Serous Cysts.[1] — Dr. Kœberlé gives the following summary of the main points of difference between these two diseases. The differential diagnosis rests mainly on the presence or absence of albuminous compounds in the liquid contents of the cysts. The fluid from ovarian cysts is generally ropy and viscid, while that from subperitoneal cysts is fluid and limpid. Ovarian cysts furnish a liquid containing a large amount of albumen and especially of paralbumen. On adding nitric acid the albumen is precipitated and this precipitate either remains unchanged or increases in amount on the addition of acetic acid. Paralbumen is also precipitated by nitric acid, but the precipitate at once disappears on the addition of acetic acid.

Subperitoneal serous cysts are unilocular, and the fluctuation found in them is very manifest, owing to the thinness of the walls. On the other hand, ovarian cysts are either unilocular or multilocular. The cysts of the broad ligament do not as a rule contain any albuminous compound. The cysts of the Fallopian tube contain albumen, but no

[1] Concluded from page 197.

[1] La France médicale, may 13, 1876.